

## REMARKS

In the Official Action mailed on **June 4, 2004**, the Examiner reviewed claims 1-18. Claims 1 and 9 were rejected under 35 U.S.C. §102(e) as being anticipated by Sangha et al. (USPub 2002/0176430, hereinafter "Sangha"). Claims 2-6, 8, 10-14, 16, and 17-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Sangha in view of Kao (USPub 2003/0037096, hereinafter "Kao"). Claims 7 and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Sangha in view of Kao and in further view of Oksanen (USPub 2002/0116568, hereinafter "Oksanen").

### Rejections under 35 U.S.C. §102(e) and 35 U.S.C. §103(a)

Independent claims 1 and 9 were rejected as being anticipated by Sangha. Independent claim 17 was rejected as being unpatentable over Sangha in view of Kao. Applicant respectfully points out that Sangha teaches assigning packets to a queue and if the queue is full, **transferring packets associated with the queue to external memory** (see Sangha, paragraphs [0012]-[0013]) while Kao teaches a **mechanization of a queue** (see Kao, Abstract). Note that in the system of Sangha, a first queue may be full and may have caused packets to be stored in external memory while a second queue has unused entries. This is wasteful because the unused entries in the second queue could have been used to store the overflow packets from the first queue instead of sending the overflow packets to external memory.

In contrast, the present invention is directed to **sharing data areas** within a data buffer among a plurality of queues (see page 2, line 17 to page 3, line 14 of the instant application). This is beneficial because the number of data areas assigned to a given queue can grow and shrink depending on the changing storage requirements of the given queue. By allowing this dynamic assignment of data areas within the data buffer, the system does not need to send packets to external

memory while unused data areas still exist in the data buffer. There is nothing within Sangha or Kao, either separately or in concert, which suggests dynamically sharing data areas within a data buffer among a plurality of queues.

Accordingly, Applicant has amended independent claims 1, 9, and 17 to clarify that the present invention shares data areas within a data buffer among a plurality of queues. These amendments find support on page 2, line 17 to page 3, line 14 of the instant application.

Hence, Applicant respectfully submits that independent claims 1, 9, and 17 as presently amended are in condition for allowance. Applicant also submits that claims 2-8, which depend upon claim 1, claims 10-16, which depend upon claim 9, and claim 18, which depends upon claim 17, are for the same reasons in condition for allowance and for reasons of the unique combinations recited in such claims.

**CONCLUSION**

It is submitted that the present application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

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